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A checklist of

Zimbabwean grasses

by

Christopher Chapano

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South African National
Biodiversity Institute





2002



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Education Centre in the National Botanic Garden. (Photo: Anthony Mapaura)



Desert House in the National Botanic Garden. (Photo: Anthony Mapaura)



Entrance to the National Herbarium. (Photo: Anthony Mapaura)



Botanic Garden Restaurant. (Photo: Anthony Mapaura)



Introduction

The flora of Zimbabwe comprises about 6 000 plant species belonging to over 200 families. Of this number, the grass family Poaceae, is the largest and can easily be considered as the most important. It accounts for about 540 species, 22 of which are naturalized, spread over 152 genera. This accounts for approximately 10% of the national vascular plant collection.

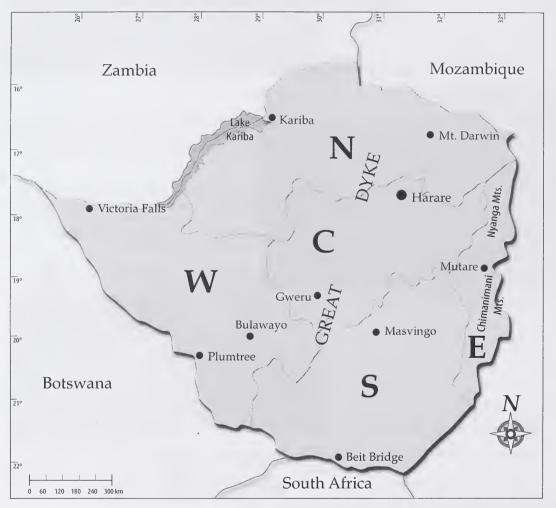
This checklist is derived from the grass collection that is housed at the National Herbarium of Zimbabwe (SRGH). The arrangement is numerical according to Clayton & Renvoize (1986). An alphabetical list is provided as an index to guide other users not familiar with the Clayton & Renvoize system. Synonyms were taken from the main references on the grasses of Zimbabwe—Fernandes *et al.* (1971), Bennett (1980), Launert & Pope (1989) and Pope (1999). Author citations for species follow Brummitt & Powell (1992) and Brummitt (1992) for genera.

The checklist is followed by maps showing the national distribution of 26 grass species which play an important role in the Zimbabwean economy and agriculture. Some species of *Oryza* and *Eleusine* are important as crops, while others like *Hyparrhenia* are of importance in the construction industry both at household level and for commercial use.

Guide for using this checklist

- i) Accepted genus and species names are in bold print, e.g. **Oxytenanthera abyssinica**. Author names of species are not given after the equal sign (=).
- ii) Synonyms are in italics, e.g. Bambusa abyssinica. Not all synonyms for a species are listed.
- iii) Naturalized taxa are preceded by an asterisk (*) e.g. **Festuca *arundinacea**. These are species that were introduced from outside Zimbabwe but now occur in the wild as part of the natural flora.
- iv) Letters after the author name(s) and separated by commas, indicate the distribution of species within Zimbabwe as reflected by the SRGH collection. A map showing these geographical divisions is given overleaf. N, northern; W, western; C, central; E, eastern; and S, southern.

Map of the floristic regions of Zimbabwe



C, central; E, eastern; N, northern; S, southern; W, western.

Checklist of Zimbabwean grasses

39 BAMBUSA Schreb.

abyssinica A.Rich. = Oxytenanthera abys-

balcooa Roxb., C.

47 OXYTENANTHERA Munro

> abyssinica (A.Rich.) Munro, N. W. C. E (Bambusa abyssinica A.Rich.) (O. borzii Mattei)

52 OLYRA L. latifolia L., E

76 ORYZA L.

barthii A.Chev., N longistaminata A.Chev. & Roehr., N, W, C punctata Steud., S

81 LEERSIA Sw.

> denudata Launert, N, C, E, S hexandra Sw., N, W, C, E, S

89 EHRHARTA Thunb.

> erecta Lam. var. natalensis Stapf erecta Lam. var. erecta, E

104 FESTUCA L.

> *arundinacea Schreb., C abyssinica A.Rich., E africana (Hack.) Clayton, E

(Pseudobromus africanus (Hack.) Stapf) (Pseudobromus silvaticus K.Schum.)

caprina Nees, E

(F. nubigena subsp. caprina (Nees) St.-Yves)

costata Nees, E

(F. milanjiana Rendle)

engleri (Pilg.) Clayton, E

(Pseudobromus engleri (Pilg.) Clayton)

fusca L. = Leptochloa fusca

milanjiana Rendle = F. costata

nubigena subsp. caprina (Nees) St.-Yves = F. caprina

104/1 PSEUDOBROMUS K.Schum.

africanus (Hack.) Stapf = Festuca africana engleri (Pilg.) Clayton = Festuca engleri silvaticus K.Schum. = Festuca africana

109 LOLIUM L.

> *multiflorum Lam., C, E *perenne L., W, C, E, S *temulentum L., C, E

121 BRIZA L. *maxima L.,W, E *minor L., C, E

124 POA L

> *annua L., N, W, C, E (P. bipollicaris Hochst.)

binata Nees, E

bipollicaris Hochst. = P. annua gangetica Roxb. = Eragrostis gangetica leptoclada A.Rich., W, E pilosa L. = Eragrostis pilosa

sarmentosa Thunb. = Eragrostis sarmentosa tef Zuccagni = Eragrostis tef

125 DACTYLIS L.

*glomerata L., C, E

164 STREBLOCHAETE Pilg. longiarista (A.Rich.) Pilg., E

171 **HELICTOTRICHON** Schult. elongatum (A.Rich.) C.E.Hubb., C, E, S

173 AVENA L.

*byzantina K.Koch, C

*fatua L., C

*sterilis L., C, S

KOELERIA Pers. 181

capensis (Steud.) Nees, E (Aira capensis Steud.) (K. cristata sensu A.Rich.) *cristata* sensu A.Rich. = K. capensis

188 HOLCUS L. *lanatus L., E

191 AIRA L.

capensis Steud. = Koeleria capensis

ANTHOXANTHUM L. 195 *odoratum L., C

196 PHALARIS L.

*minor Retz., N, W, C, E, S

197 AGROSTIS L.

> alba var. schimperiana (Steud.) Engl. = A. schimperiana

continuata Stapf, C, E

greenwayi C.E.Hubb. = A. producta

lachnantha Nees, N, W, C, E

(A. lachnantlia Nees var. glabra Gooss. & Pa-

laclmantha Nees var. glabra Gooss. & Papendorf = A. lachnantha

AGROSTIS L. (cont.) 197 producta Pilg., E

(A. greenwayi C.E.Hubb.)

schimperiana Steud. = Polypogon schimpe-

(A. alba var. schimperiana)

212 POLYPOGON Desf.

*monspeliensis (L.) Desf., S

semiverticillatus (Forssk.) Hyl. = P. viridis

schimperianus (Steud.) Cope, E

(Agrostis alba var. schiuperiana (Steud.) Engl.)

(Agrostis schiniperiana Steud.)

*viridis (Gouan) Breistr.

(P. semiverticillatus (Forssk.) Hyl.)

BRACHYPODIUM P.Beauv. 227 flexum Nees, E

250 BROMUS L.

*catharticus Vahl, N, W, C, E

(B. unioloides Kunth)

*diandrus Roth, C

*hordeaceus L. subsp. ferronii (Mabille)

P.M.Sm., C

*inermis Levss., C

leptoclados Nees, E

pectinatus Thunb., C

unioloides Kunth = B. catharticus

255 TRIBOLIUM Desv. *pusilla Nees, S

ELYTROPHORUS P.Beauv. 257

globularis Hack., N, W, C

spicatus (Willd.) A.Camus, N, W, C

PHRAGMITES Adans. 293

australis (Cav.) Steud., N, W, C, E

mauritianus Kunth, N, W, C, E, S

297 **SARTIDIA** De Winter

angolensis (C.E.Hubb.) De Winter, W, S

298 **STIPAGROSTIS** Nees

hirtigluma (Trin. & Rupr.) De Winter subsp.

patula (Hack.) De Winter, S

uniplumis (Licht.) De Winter var. intermedia

(Schweick.) De Winter, N, W, S

uniplumis (Licht.) De Winter var. neesii

(Trin. & Rupr.) De Winter, W, S

uniplumis (Licht.) De Winter var. uniplumis, S

299 ARISTIDA L.

adscensionis L., N, W, C, E, S

(A. adscensionis L. subsp. guineensis (Trin.&

Rupr.) Henrard)

(A. curvata (Nees) T.Durand & Schinz)

adscensionis L. subsp. guineeusis (Trin. & Rupr.)

Henrard = A. adscensionis

aequiglumis Hack., N. C. S

andoniensis Henrard = A. rhiniochloa

argentea Schweick. = A. mollissima subsp. argentea

atroviolacea Hack. = A. recta

barbicollis Trin. & Rupr. = A. congesta subsp. barbicollis

borumensis Henrard = A. scabrivalvis subsp. borumensis

brainii Melderis, W

(A. serrulata sensu Stent & J.M.Rattray)

canescens Henrard subsp. canescens, N, W congesta Roem. & Schult. subsp. barbicollis

(Trin. & Rupr.) De Winter, N, W, C, E, S (A. barbicollis Trin. & Rupr.)

congesta Roem. & Schult. subsp. congesta, N, W, C, E, S

contractinodis Stent & J.M.Rattray = A. junciformis subsp. macilenta

cumingiana Trin. & Rupr., N, C

(A. delicatula A.Rich.)

cumingiana var. diminuta (Mez) Jacq.-Fél. = A. diminuta

cumingiana var. *usiseta* Stent & I.M.Rattray = A. diminuta

curvata (Nees) T.Durand & Schinz = A. adscensionis

delicatula A.Rich. = A. cumingiana

denudata Pilg., W, C

diffusa Trin. subsp. burkei (Stapf) Melder-

(A. diffusa Trin. var. burkei (Stapf) Schweick.)

diffusa Trin. var. burkei (Stapf) Schweick. = A. diffusa subsp. burkei

diminuta (Mez) C.E.Hubb., N, W, C, E, S

(A. cuuingiana var. diminuta (Mez) Jacq.-Fél.)

(A. cumingiana var. uniseta Stent & J.M.Rattray)

eriophora Henrard = A. leucophaea

filiforniis Henrard = A. scabrivaivis subsp. borumensis

fontismagni Schweick. = A. stipoides

graciliflora Pilg. = A. stipitata subsp. graciliflora

hispidula Henrard, N. W. S

hordeacea Kunth, N, W, C, S

junciformis Trin. & Rupr. subsp. macilenta (Henrard) Melderis, N, W, C, E, S

(A. contractinodis Stent & J.M.Rattray)

(A. macilenta Henrard)

junciformis Trin. & Rupr. subsp. welwitschii (Rendle) Melderis, N, W, C, E, S

(A. pardyi Stent & J.M.Rattray)

leucophaea Henrard, W, C, S

(A. eriophora Henrard)

macilenta Henrard = A. junciformis subsp. macilenta

meridionalis Henrard, N, W, C, E, S

mollissima Pilg. subsp. argentea (Schweick.)

Melderis, W, E, S

(A. argentea Schweick.)

mollissima Pilg. subsp. mollissima, N, W, C,

pardyi Stent & J.M.Rattray = A. junciformis subsp. welwitschii

pilgeri Henrard, N, W, C, E, S

ramifera Pilg. = A. stipitata subsp. ramifera

recta Franch., N, C, E

(A. atroviolacea Hack.)

rhiniochloa Hochst., N, W, C, E, S

(A. andoniensis Henrard)

scabrivalvis Hack. subsp. borumensis (Henrard) Melderis, N, W, C, S

(A. borumensis Henrard)

(A. filiformis Henrard)

scabrivalvis Hack. subsp. contracta (De Winter) Melderis, N, W, C, E

scabrivalvis Hack. subsp. scabrivalvis, N, W, C, E, S

serrulata sensu Stent & J.M.Rattray = A. brainii

stipitata Hack. subsp. graciliflora (Pilg.) Melderis, N, W, C, S

(A. stipitata Hack. var. graciliflora (Pilg.)
De Winter)

(A. graciliflora Pilg.)

stipitata Hack. subsp. ramifera (Pilg.) Melderis, C

(A. ramifera Pilg.)

stipitata Hack. subsp. robusta (Stent & J.M.Rattray) Melderis, N, W, C, S

(A. stipitata var. robusta (Stent & J.M.Rattray) De Winter)

stipitata Hack. subsp. spicata (De Winter) Melderis, S

stipitata Hack. subsp. stipitata, W, C, S stipitata Hack. var. graciliflora (Pilg.) De Winter = A. stipitata subsp. graciliflora

stipitata Hack. var. robusta (Stent & J.M. Rattray) De Winter = A. stipitata subsp. robusta

stipoides Lam., W, S

(A. fontismagni Schweick.)

transvaalensis Henrard, W vestita Thunb., N, W, C, E, S

(Chaetaria vestita (Thunb.) Beauv.)

vinosa Henrard = A. stipitata subsp. graciliflora

299/1 *CHAETARIA* P.Beauv. *vestita* (Thunb.) Beauv. = **Aristida vestita**

301 ENNEAPOGON P.Beauv. cenchroides (Roem. & Schult.) C.E.Hubb., N,

W, E, S desvauxii P.Beauv., S scoparius Stapf, W, E, S

302 **SCHMIDTIA** Steud. ex J.A. Schmidt pappophoroides Steud., N, W, C, E, S

324 **TRIRAPHIS** R.Br. **schinzii** Hack., W, C, E, S

337 LEPTOCHLOA P.Beauv.
chinensis (L.) Nees, E, S
falcata Hack. = Pogonarthria squarrosa
fusca (L.) Kunth, N, W, C, E, S
(Diplaclme fusca (L.) P.Beauv. & Schult.)
(Festuca fusca L.)
panicea (Retz.) Ohwi, N, E, S
uniflora A.Rich., N, W, E, S

337/1 DIPLACHNE P.Beauv.

fusca (L.) P.Beauv. ex Roem. & Schult. = Leptochloa fusca
menyliartliii Hack. = Pogonarthria squarrosa

340 TRIPOGON Roem. & Schult. minimus (A.Rich.) Steud., N, W, C, E, S

342 **OROPETIUM** Trin. capense Stapf, S

343 **ODYSSEA** Stapf paucinervis (Nees) Stapf, W, E, S

344 BEWSIA Gooss. biflora (Hack.) Gooss., N, W, C, E, S

348 **LOPHACME** Stapf digitata Stapf, C

349 **LEPTOCARYDION** Stapf **vulpiastrum** (De Not.) Stapf, N, W, C, E, S

350 TRICHONEURA Andersson
grandiglumis (Nees) Ekman, N, W, C, E, S
(*T. grandiglumis* var. *minor* (Rendle) Chippind.)
grandiglumis (Nees) Ekman var. *minor*(Rendle) Chippind. = T. grandiglumis

352 DINEBRA Jacq.
retroflexa (Vahl) Panz. var. condensata
S.M.Phillips, N, W, E, S

ERAGROSTIS Wolf 356 acraea De Winter, W, C, E acutissima Jedwabn. = E. nindensis aethiopica Chiov., N, W, E, S amabilis (L.) Hook. & Arn., W (E. tenella (L.) Roem. & Schult.) angusta Hack. = E. rotifer arenicola C.E.Hubb., N, W, C, E aspera (Jacq.) Nees, N, W, C, E, S atrovirens (Desf.) Trin., N, W, C auriculata Hack. = E. echinochloidea barrelieri Daveau, N, C bicolor Nees, W. C. S biflora Hack. ex Schinz, W blepharolepis Hack. = E. hispida

356 **ERAGROSTIS** Wolf (cont.) botryodes Clayton, W brainii (Stent) Launert, N, W, C buchananii K.Schum. = E. nindensis caesia Stapf, E caniflora Rendle, E capensis (Thunb.) Trin., N, W, C, E, S castellaneana Buscal. & Muschl., N chalcantha Trin. = E. racemosa chapelieri (Kunth) Nees, N, W, C, E, S (E. dolichostachya Peter) chaunantha Nees = E. lehmanniana cilianensis (All.) Vignolo ex Janch., N, W, C, (E. polysperma Peter) ciliaris (L.) R.Br. (E. ciliaris var. brachystachya Boiss.) (E. ciliaris var. latifolia Hack.) ciliaris var. brachystachya Boiss. = E. ciliaris ciliaris var. latifolia Hack. = E. ciliaris cimicina Launert, W collocarpa K.Schum. = E. tenuifolia comata Peter = E. lappula congesta Oliv., E (E. eichingeri Pilg.) crassinervis Hack., W, S (E. poecilautlia Stapf) curvula (Schrad.) Nees, N, W, C, E, S (E. jeffreysii Hack.) cylindriflora Hochst., N, W, C, E, S (E. rigidor Pilg.) (E. trichophora Coss. & Durieu) cylindriflora sensu Simon = E. glandulosipedata dekindtii Pilg. = E. macilenta densa De Winter = E. welwitschii denudata Hack. = E. nindensis desoluta Launert, E dolichostachya Peter = E. chapelieri dura Stapf = E. pallens echinochloidea Stapf, W (E. auriculata Hack.) eichingeri Pilg. = E. congesta friesii Pilg., N, W, C (E. valida Pilg.) galpinii Stent = E. inamoena gangetica (Roxb.) Steud., N, W, C, E (Poa gangetica Roxb.) glandulosipedata De Winter, N, W, C, E (E. cyliudriflora sensu Simon) (E. jeffreysii sensu Simon) glischra Launert, W gummiflua Nees, W, C, S habrantha Rendle, N, W, C, E, S heteromera Stapf (E. wilmsii Stapf) hierniana Rendle, N, W, C, E, S (E. uniglumis Hack.) hispida K.Schum., N, W, C, E, S (E. blepharolepis Hack.)

inamoena K.Schum., N, W, C, E, S (E. galpinii Stent) japonica (Thunb.) Trin., N, W, C, E, S (Diandrochloa namaquensis (Nees) De Winter) (E. namaquensis Nees) jeffreysii Hack. = E. curvula jeffreysii sensu Simon = E. glandulosipedata lappula Nees, N, W, C, E, S (E. comata Peter) (E. uniglumis sensu Simon) lasiophylla K.Schum. = E. racemosa latifolia Cope, N lehmanniana Nees, W, C, E, S (E. channantha Nees) (E. vansouii Bremek. & Oberm.) leptotricha Cope, W longipaniculata De Wild. = E. mollior macilenta (A.Rich.) Steud., N (E. dekindtii Pilg.) (E. passa Rendle) margaritacea Stapf = E. rotifer marlothii Hack. = Pogonarthria squarrosa membranacea Hack. ex Schinz, N mollior Pilg. ex R.E.Fr., E (E. longipaniculata De Wild.) namaquensis Nees = E. japonica nebulosa Stapf = E. planiculmis nindensis Ficalho & Hiern, N, W, C, E, S (E. acutissima Jedwabn.) (E. buchananii K.Schum.) (E. denudata Hack.) pallens Hack., W, C, S (E. dura Stapf) paradoxa Launert, N, W, C, E, S passa Rendle = E. macilenta patens Oliv., N, W, C, E, S patentipilosa Hack., N, W, C, E, S (E. pseudosclerautlia Chiov.) phyllacantha Cope, C pilosa (L.) P.Beauv., N, W, C, E, S (Poa pilosa L.) plana Nees, N, W, C, E, S planiculmis Nees, N, W, C (E. nebulosa Stapf) podotricha Chiov. = E. porosa *poecilantha* Stapf = **E. crassinervis** *polysperma* Peter = **E. cilianensis** porosa Nees, N, W, E, S (E. podotricha Chiov.) procumbens Nees, W pseudosclerantha Chiov. = E. patentipilosa racemosa (Thunb.) Steud., C, E, S (E. chalcantha Trin.) (E. lasiophylla K.Schum.) rigidior Pilg. = E. cylindriflora rogersii C.E.Hubb., N, W rotifer Rendle, N, W, C, E, S (E. angusta Hack.) (E. margaritacea Stapf) saresbriensis Launert, N, C

sarmentosa (Thunb.) Trin., N, W, C, E, S (Poa sarmentosa Thunb.) sclerantha Nees subsp. sclerantha, E sclerantha Nees subsp. villosipes (Jedwabn.) Launert, N. W. C. E. S (E. sclerantha var. villosipes De Winter) (E. villosipes Jedwabn.) sclerantha var. villosipes De Winter = E. sclerantha subsp. villosipes stapfii De Winter, N, W, C, E, S strigosa Anderson = E. viscosa superba Peyr., N, W, C, E, S (E. superba var. contracta Peter) superba var. contracta Peter = E. superba tef (Zuccagni) Trotter, W, C, E (Poa tef Zuccagni) tenella (L.) Roem. & Schult. = E. amabilis tenuifolia (A.Rich.) Hochst., N, W, C, E, S (E. collocarpa K.Schum.) (Poa tenuifolia A.Rich.) tenuifolia A.Rich. = E. tenuifolia tincta S.M.Phillips, E (Stiburus alopecuroides (Hack.) Stapf) transvaalensis Gand. = E. viscosa tremula Hochst., N, W trichophora Coss. & Durieu = E. cylindriflora uniglumis Hack. = E. hierniana uniglumis sensu Simon = E. lappula vacillans sensu Simon = E. venustula valida Pilg. = E. friesii vausonii Bremek. & Oberm. = E. lehmanniana venustula Launert, N, W, C, S (E. vacillans sensu Simon) villosipes Jedwabn. = E. sclerantha subsp. villosipes viscosa (Retz.) Trin., N, W, C, E, S (E. strigosa Anderson) (E. transvaalensis Gand.) volkensii Pilg., E

356/1 *DIANDROCHLOA* De Winter

uamaquensis (Nees) De Winter = Eragrostis
japonica

welwitschii Rendle, W

wilmsii Stapf = E. heteromera

POGONARTHRIA Stapf

(E. densa De Winter)

356/2 STIBURUS Stapf

365

fleckii (Hack.) Hack., N, W, S
(Pogonarthria tuberculata Pilg.)
squarrosa (Roem. & Schult.) Pilg., N, W, C,
E, S
(Diplacline menyharthii Hack.)
(Eragrostis marlothii Hack.)
(Leptochloa falcata Hack.)
tuberculata Pilg. = P. fleckii

370 ELEUSINE Gaertn.
africana Kenn.-O'Byrne, N, W, C, E, S
indica (L.) Gaertn., N, W, E
verticillata Roxb. = Acrachne racemosa

371 **ACRACHNE** Wight & Arn. ex Chiov. racemosa (Roem. & Schult.) Ohwi, N, W, E, S (*Eleusine verticillata* Roxb.)

373 DACTYLOCTENIUM Willd.

aegyptium (L.) Willd., N, W, C, E, S
(Dactyloctenium mpuetensis De Wild.)

geminatum Hack., N, S
giganteum Fisher & Schweick., N, W, C, E, S
mpuetensis De Wild. = D. aegyptium

SPOROBOLUS R.Br. 377 acinifolius Stapf, N, W (S. tenellus sensu Bennett) africanus (Poir.) Robyns & Tournay, W, C barbigerus Franch. = S. subtilis bechuanicus Gooss., W (S. spicatus sensu Simon) centrifugus (Trin.) Nees, E (S. filifolius Stent) (S. tysonii Stent) congoensis Franch., N, C, E (S. eylesii Stent & J.M.Rattray) conrathii Chiov. = S. welwitschii consimilis Fresen., N, W, E, S cordofanus (Steud.) Coss., N, W, E, S *eylesii* Stent & J.M.Rattray = **S. congoensis** festivus A.Rich., N, W, C, E, S (S. festivus var. fibrosus Stent) (S. menyliartliii Hack.) *festivus* var. *fibrosus* Stent = **S. festivus** filifolius Stent = S. centrifugus fimbriatus (Trin.) Nees, N, W, C, E, S (S. fimbriatus var. latifolius Stent) fimbriatus var. latifolius Stent = S. fimbriatus ioclados (Trin.) Nees, N, W, C, E, S kentrophyllus (K.Schum.) Clayton, N, W, C, mauritianus (Steud.) T.Durand & Schinz, C, mayumbensis Franch. = S. molleri

mauritianus (Steud.) T.Durand & Schinz, C, E, S
mayumbensis Franch. = S. molleri
menyliarthiii Hack. = S. festivus
micranthus (Steud.) T.Durand & Schinz, N, W, C, S
(S. psammophilus Stent & J.M.Rattray)
molleri Hack., N, W, C, S

(*S. mayumbensis* Franch.)
(*S. secundispiculus* Chiov.)

mopane Cope, N

myrianthus Benth., N, W, C, E

nitens Stent, W, S

panicoides A.Rich., N, W, C, E, S

paniculatus T.Durand & Schinz, N, W, C, E

piliferus Kunth, C, E

377 SPOROBOLUS R.Br. (cont.)

psammophilus Stent & J.M.Rattray = S. micranthus
pyramidalis P.Beauv., N, W, C, E, S
sanguineus Rendle, N, W, C, E, S
schlechteri Schweick. = S. centrifugus
secundispiculus Chiov. = S. molleri
spicatus (Vahl) Kunth, N, W
spicatus sensu Simon = S. bechuanicus
stapfianus Gand., N, W, C, E, S
stolzii Mez, N, W, C
subtilis Kunth, N, C, E, S
(S. barbigerus Franch.)
tenellus sensu Bennett = S. acinifolius
tysonii Stent = S. centrifugus
uniglumis Stent & J.M.Rattray, N, W
virginicus (L.) Kunth, W, S

385 LEPTURUS R.Br.

radicans (Steud.) A.Camus, E, S (Monerma radicans (Steud.) Hack.) (Ophiuros radicans Steud.)

(S. virginicus var. major Franch.)

welwitschii Rendle, E

(S. conratliii Chiov.)

virginicus var. major Franch. = S. virginicus

385/1 **OPHIUROS** C.F.Gaertn.

radicans Steud. = Lepturus radicans

385/2 MONERMA auct.

radicans (Steud.) Hack. = Lepturus radicans

387 LINTONIA Stapf

nutans Stapf, W, S

(Negria melicoides Chiov.)

387/1 NEGRIA Chiov.

melicoides Chiov. = Lintonia nutans

389 TETRAPOGON Desf.

mossambicensis (K.Schum.) Chippind. = Chloris mossambicensis tenellus (Roxb.) Chiov., W, E, S (Chloris tenella K.D.Koenig)

391 CHLORIS Sw.

abyssinica Hochst. = C. gayana
diluta Renvoize, C
gayana Kunth, N, W, C, E, S
(C. abyssinica Hochst.)
(C. glabrata Andersson)
glabrata Andersson = C. gayana
leptostachya Hochst. = C. pycnothrix
mossambicensis K.Schum., E, S
(Tetrapogon mossambicensis (K.Schum.) Chippind.)
myriostachya Hochst. = C. roxburghiana
polystachya Roxb. = C. roxburghiana

pycnothrix Trin., N, W, C, E, S
(C. leptostachya Hochst.)
roxburghiana Schult., N, W, C, E, S
(C. myriostachya Hochst.)
(C. polystachya Roxb.)
tenella K.D.Koenig = Tetrapogon tenellus
virgata Sw., N, W, C, E, S

392 EUSTACHYS Desv.

paspaloides (Vahl) Lanza & Mattei, N, W, C, E, S

396 ENTEROPOGON Nees

macrostachyus (A.Rich.) Benth., N, W, C, E, S

399 **WILLKOMMIA** Hack. sarmentosa Hack., W

401 CRASPEDORHACHIS Benth.

africana Benth., N, W, C, E, S
digitata Kupicha & Cope, C, S
rhodesiana Rendle, N, W, C, E, S
(C. rhodesiana var. gracilior C.E.Hubb.)
rhodesiana var. gracilior C.E.Hubb. = C. rhodesiana

406 CTENIUM Panz.

concinnum Nees, N, C, E somalense (Chiov.) Chiov., C, E

407 MICROCHLOA R.Br.

abyssinica Hochst. = M. kunthii altera (Rendle) Stapf, E (Rendlia altera (Rendle) Chiov.) caffra Nees, N, W, C, E, S indica (L.f.) P.Beauv., N, W, C kunthii Desv., N, W, C, E, S (M. abyssinica Hochst.)

407/1 RENDLIA Chiov.

altera (Rendle) Chiov. = Microchloa altera

409 CYNODON Rich.

*aethiopicus Clayton & Harlan, N, C, E
dactylon (L.) Pers., N, W, C, E, S
*incompletus Nees, C
nlemfuensis Vanderyst var. nlemfuensis, N,
W, C, E, S
nlemfuensis Vanderyst var. robusta Clayton
& Harlan, C, E
*plectostachyus (K.Schum.) Pilg., C
*transvaalensis Burtt Davy, C

411 BRACHYACHNE (Benth.) Stapf

chrysolepis C.E.Hubb. = B. patentiflora fulva Stapf, E patentiflora (Stent & J.M.Rattray) C.E.Hubb., N, W, C, S (*B. chrysolepis* C.E.Hubb.)
(*B. upembaensis* Van der Veken)

**npembaensis* Van der Veken = B. patentiflora

413 **SCHOENEFELDIA** Kunth **transiens** (Pilg.) Chiov., S

414 POGONOCHLOA C.E.Hubb. greenwayi C.E.Hubb., E

434 TRAGUS Haller

arenarius Bremek. & Oberm. = T. racemosus berteronianus Schult., N, W, C, E, S koelerioides Asch., W
(T. racemosus var. major Hack.)
racemosus (L.) All., W
(T. arenarius Bremek. & Oberm.)
racemosus var. major Hack. = T. koelerioides

441 PEROTIS Aiton leptopus Pilg., N, W, C patens Gand., N, W, C, E, S

vaginata Hack., N, W, C, E,

448 POECILOSTACHYS Hack.

oplismenoides (Hack.) Clayton, E (*Chloacline oplismenoides* (Hack.) Robyns)

448/1 CHLOACHNE Stapf

oplismenoides (Hack.) Robyns = Poecilostachys oplismenoides

449 **PSEUDECHINOLAENA** Stapf **polystachya** (Kunth) Stapf, C, E

(Echinochloa polystachya (Kunth) Roberty) (Echinolaena polystachya Kunth)

451 **OPLISMENUS** P.Beauv.

burmannii (Retz.) P.Beauv., N, W, C, E, S (*Panicum burmannii* Retz.) compositus (L.) P.Beauv., C, E, S (*Panicum compositum* L.) hirtellus (L.) P.Beauv., N, W, C, E, S

(Panicum hirtellum L.) undulatifolius (Ard.) Roem. & Schult., E (Panicum undulatifolium Ard.)

455 PANICUM L.

acutissimum Peter = P. poaeoides aphanoneurum Stapf = P. fluviicola arcurameum Stapf, N, W, C, E, S atrosanguineum A.Rich., N, W, S bechuanense Bremek. & Oberm., W brazzavillense Franch., C, E (P. ianthum Stapf) brevifolium L., E

bulawayense Hack. = Urochloa oligotricha burmannii Retz. = Oplismenus burmannii chambeshii Renvoize, N colonum L. = Echinochloa colona coloratum L. var. coloratum, N, W, C, E, S (*P. crassipes* Mez)

(*P. swymertonii* Rendle)

compositum L. = Oplismenus compositus crassipes Mez = P. coloratum var. coloratum deustum Thunb., N. C. E. S

dimidiatum L. = Stenotaphrum dimidiatum

dregeanum Nees, N, W, C, E, S ecklonii Nees, N, W, C, E

(P. pectinatum Rendle)

eickii Mez, E

eruciforme Sm. = Brachiaria eruciformis fluviicola Steud., N, W

(P. aphanoneurum Stapf)

(P. purpurascens Mez)

glabrescens Steud. = P. subalbidum

glandulopaniculatum Renvoize, E gracilicaule Rendle, N

(P. verruciferum Mez)

graciliculme Napper = P. poaeoides

graniflorum Stapf, N, W

haplocaulos Pilg., W

heterostachyum Hack., N, W, C, E, S

liirtellum L. = Oplismenus hirtellus

Immidicola Rendle = Brachiaria humidicola hymeniochilum Nees, E, S

(P. snowdenii C.E.Hubb.)

iantlnım Stapf = P. brazzavillense

inaequilatum Stapf & C.E.Hubb., E, S

infestum Peters, N, W, C, E, S

italicum L. = Setaria italica

jubatum Fig. & De Not. = Brachiaria jubata

juncifolium Stapf = P. natalense

kalaharense Mez, N, W, E, S

kasumense Renvoize, W

laevifolium Hack. = P. schinzii

laticomum Nees, E, S

leucacranthum K.Schum. = Brachiaria

leucacrantha

madipirense Mez, N

maximum Jacq., N, W, C, E, S

(P. maximum var. altissimum Kuntze)

(P. maximum var. trichoglume Robyns)

maximum var. altissimum Kuntze = P. maxi-

mum

maximum var. trichoglume Robyns = P. maximum

merkeri Mez, W

meyerianum var. grandeglume Stent & J.M.Rattray = Eriochloa meyeriana

micrococcum (Mez) Peter = Sacciolepis micrococca

cocca

monticola Hook.f., N, E

natalense Hochst., N, W, C, E, S

(P. juncifolium Stapf)

nervatum (Franch.) Stapf, E

(Isacline nervata Franch.)

nigropedatum Ficalho & Hiern = Brachiaria nigropedata

nigropedata

novemnerve Stapf, N, W, C, E, S

455 PANICUM L. (cont.)

nudiglume var. major Rendle = Brachiaria

oryzoides Ard. = Echinochloa oryzoides

pectinatuu Rendle = P. ecklonii

peteri Pilg., E

(Polyneura squarrosa Peter)

phragmitoides Stapf, W, E

(P. pliragmitoides var. lasioneuron Stapf)

phragmitoides var. lasioneuron Stapf = P.

phragmitoides

poaeoides Stapf, W

(P. acutissimum Peter)

(P. graciliculme Napper)

porphyrrhizos Steud., N, W, C

proliferum var. longijubatum Stapf = P. subal-

purpurascens Mez = P. fluviicola

repens L., N, W, C, S

repentellum Napper, N, C

sabiense Renvoize, N, W, C, E, S

schinzii Hack., N, C, E, S

(P. laevifolium Hack.)

serrifolium Hochst. = Brachiaria serrifolium snowdenii C.E.Hubb. = P. hymeniochilum

subalbidum Kunth, N, W, C, E, S

(P. glabrescens Steud.)

(P. proliferum var. longijubatum Stapf)

swunnertonii Rendle = P. coloratum var. co-

loratum

teplirosauthium Schinz = P. maximum

trichocladum Hack. ex K.Schum., E

trichoides Sw., N. C

trichonode Launert & Renvoize, N, W, C, E,

undulatifolium Ard. = Oplismenus undulatifolius

verruciferum Mez = P. gracilicaule

wiehei Renvoize, E

xantholeucum Schinz = Brachiaria xantho-

zambesiense Renvoize, N, W

455/2 POLYNEURA Peter

squarrosa Peter = Panicum peteri

465 **SACCIOLEPIS** Nash

africana C.E.Hubb. & Snowden, N, C

brevifolia Stapf = S. chevalieri

chevalieri Stapf, N, W, C, E

(S. brevifolia Stapf)

claviformis Simon = S. indica

curvata (L.) Chase, E, S

glancescens Stapf = S. typhura

gracilis Stent & J.M.Rattray = S. indica

lmillensis (Rendle) Stapf = S. spiciformis

indica (L.) Chase, C

(S. claviformis Simon)

(S. gracilis Stent & J.M.Rattray)

interrupta (Willd.) Stapf, N. W. C

(Panicum interruptum Willd.)

interruptum Willd. = S. interrupta

luciae Simon = **S.** spiciformis

micrococca Mez, N

(Panicum micrococcum (Mez) Peter)

spiciformis (A.Rich.) Stapf, N, W, C, E, S

(S. luillensis (Rendle) Stapf)

(S. luciae Simon)

transbarbata Stapf, N

typhura (Stapf) Stapf, N, W, C, E, S

(S. glancescens Stapf)

ACROCERAS Stapf

macrum Stapf, N, W, C, S

476 ECHINOCHLOA P.Beauv.

aristifera (Peter) Robyns & Tournay = E. haploclada

colona (L.) Link, N, W, C, E, S

(Panicum colonum L.)

colona var. frumentacea (Link) Ridl. = E. frumentacea

frumentacea Link, W, C, E, S

(E. colona var. frumentacea (Link) Ridl.)

haploclada (Stapf) Stapf, N, W, E, S

(E. aristifera (Peter) Robyns & Tournay)

liolubii (Stapf) Stapf = E. pyramidalis

jubata Stapf, N, W, C, S

*oryzoides (Ard.) Fritsch, W

(Panicum oryzoides Ard.)

polystachya (Kunth) Roberty = Pseudechino-

laena polystachya

polystachya Kunth = Pseudechinolaena poly-

stachya

pyramidalis (Lam.) Hitchc. & Chase, N, W, C, S

(E. Itolubii (Stapf) Stapf)

stagnina (Retz.) P.Beauv., N, W, C, S

ugandensis Snowden & C.E.Hubb., N, W, C,

*utilis Ohwi & Yabuno, N

ORYZIDIUM C.E.Hubb. & Schweick. 479 barnardii C.E.Hubb. & Schweick., W

481 **ALLOTEROPSIS** C.Presl

cimicina (L.) Stapf, N, W, C, S

gwebensis Stent & J.M.Rattray = A. semialata subsp. eckloniana

semialata (R.Br.) Hitchc. subsp. semialata, N, W, C, E, S

semialata (R.Br.) Hitchc. subsp. eckloniana (Nees) Gibbs Russ., E

(A. gwebensis Stent & J.M.Rattray)

485 BRACHIARIA (Trin.) Griseb.

arrecta (T.Durand & Schinz) Stent, N, W, C, E (B. latifolia Stapf)

bovonei (Chiov.) Robyns, N, W, C, E, S (B. viridula Stapf) brachylopha Stapf = B. serrata brizantha (A.Rich.) Stapf, N, W, C, E, S (B. brizantha var. angustifolia Stent & I.M.Rattray) brizantlıa var. angustifolia Stent & J.M.Rattray = B. brizantha deflexa (Schumach.) C.E.Hubb. ex Robyns, N. W, C, E, S (Pseudobracliiaria deflexa (Schumach.) Launert) dura Stapf, W (B. dura var. pilosa J.G. Anderson) dura var. pilosa J.G.Anderson = B. dura eruciformis (Sm.) Griseb., N, W, C, E, S (Panicum eruciforme Sm.) filifolia Stapf = B. subulifolia grossa Stapf, N, W, C, E, S (Panicum nudiglume var. major Rendle) humidicola (Rendle) Schweick., N, W, C, E, (Panicum liumidicola Rendle) jubata (Fig. & De Not.) Stapf, N, W, C (Panicum jubatum Fig. & De Not.) *latifolia* Stapf = B. arrecta leucacrantha (K.Schum.) Stapf, W (Panicum leucacranthum K.Schum.) malacodes (Mez & K.Schum.) Scholz, N (B. poaeoides Stapf) nigropedata (Ficalho & Hiern) Stapf, N, W, C, E, S (Panicum nigropedatum Ficalho & Hiern) poaeoides Stapf = B. malacodes pubifolia (Mez) Stapf & C.E.Hubb. = B. xantholeuca ramosa (L.) Stapf, N, W, C, E, S (Urochloa ramosa (L.) Nguyen) rugulosa Stapf, N (B. umboensis Stent & J.M.Rattray) scalaris Pilg., E serrata (Thunb.) Stapf, N, W, C, E, S (B. brachylopha Stapf) serrifolia (Hochst.) Stapf, E, S (Panicum serrifolium Hochst.) subulifolia (Mez) Clayton, N, W, C, E (B. filifolia Stapf) umbellata (Trin.) Clayton, C, E (Panicum umbellatum Trin.) umbellatum Trin. = B. umbellata umboensis Stent & J.M.Rattray = B. rugulosa viridula Stapf = B. bovonei xantholeuca (Schinz) Stapf, N, W, C, E, S

485/1 PSEUDOBRACHIARIA Launert deflexa (Schumach.) Launert = Brachiaria deflexa

(B. pubifolia (Mez) Stapf & C.E.Hubb.)

487 **UROCHLOA** P.Beauv. *bolbodes* (Steud.) Stapf = **U. oligotricha**

(Panicum xantholeucum Schinz)

brachyura (Hack.) Stapf, W, C, S
mosambicensis (Hack.) Dandy, N, W, C, E, S
(U. pullulans Stapf)
(U. thodesiensis Stent)
oligotricha (Fig. & De Not.) Henrard, N, W, C, E, S
(Panicum bulawayense Hack.)
(U. bolbodes (Steud.) Stapf)
panicoides P.Beauv., N, W, C, E, S
pullulans Stapf = U. mosambicensis
ranosa (L.) Nguyen = Brachiaria ramosa
rlodesiensis Stent = U. mosambicensis
trichopus (Hochst.) Stapf, N, W, C, E, S

488 ERIOCHLOA Kunth

fatmensis (Hochst. & Steud.) Clayton, W, S
(E. nubica (Steud.) Thell.)
macclounii Stapf, N, W
meyeriana (Nees) Pilg., N, W, C, E, S
(Panicum meyerianum var. grandeglume Stent &
J.M.Rattray)
nubica (Steud.) Thell. = E. fatmensis

495 PASPALUM L.

*plicatulum Michx., C
*dilatatum Poir., N, C, E, S
distichum L., N, W, C
glumaceum Clayton, N, C
lamprocaryon K.Schum., W
*notatum Flüggé, C, E, S
orbiculare G.Forst. = P. scrobiculatum
polystaclnynun R.Br. = P. scrobiculatum
scrobiculatum L., N, W, C, E, S
(P. orbiculare G.Forst.)
(P. polystaclnynun R.Br.)
*urvillei Steud., N, C, E

500 AXONOPUS P.Beauv.

*affinis Chase, E, S *compressus (Sw.) P.Beauv., E, S

503 **SETARIA** P.Beauv.

angustifolia Stapf = S. sphacelata chevalieri Stapf = S. megaphylla ciliolata Stapf & C.E.Hubb. = S. incrassata *eylesii* Stapf & C.E.Hubb. = **S. incrassata** homonyma (Steud.) Chiov., N, W, C, E, S incrassata (Hochst.) Hack., N, W, C, E, S (S. ciliolata Stapf & C.E.Hubb.) (S. eylesii Stapf & C.E.Hubb.) (S. palustris Stapf) (S. plianerococca Stapf) (S. rudifolia Stapf) interpilosa Stapf & C.E.Hubb. = S. petiolata *italica (L.) P.Beauv., N, W, C, S (Panicum italicum L.) lindenbergiana (Nees) Stapf, N, W, C, E, S longiseta P.Beauv., N, W, C, E (S. paniciformis Rendle)

SETARIA P.Beauv. (cont.) 503

> megaphylla (Steud.) T.Durand & Schinz, N, W, C, E, S

(S. chevalieri Stapf)

orthosticha Herrm., N, W, C, E, S

pallide-fusca (Schum.) Stapf & C.E.Hubb. = S. pumila

palustris Stapf = S. incrassata

paniciformis Rendle = S. longiseta

petiolata Stapf & C.E.Hubb., N, W, E, S

(S. interpilosa Stapf & C.E.Hubb.)

phanerococca Stapf = S. incrassata

phragmitoides Stapf = S. incrassata

pseudaristata (Peter) Pilg., W

pumila (Poir.) Roem. & Schult., N, W, C, E, S

(S. pallide-fusca (Schum.) Stapf & C.E.Hubb.)

(S. ustilata De Wit)

rndifolia Stapf = S. incrassata

sagittifolia (A.Rich.) Walp., N, W, C, E, S

sphacelata (Schumach.) Moss, N, W, C, E, S

(S. angustifolia Stapf)

(S. torta Stapf)

torta Stapf = S. sphacelata

ustilata De Wit = S. pumila

verticillata (L.) P.Beauv., N, W, C, E, S

504 **PASPALIDIUM** Stapf

obtusifolium (Delile) N.D.Simpson, N, C, E,

(P. platyrrhachis C.E.Hubb.)

platyrrhachis C.E.Hubb. = P. obtusifolium

512 STENOTAPHRUM Trin.

*dimidiatum (L.) Brongn., C, S

(Panicum dimidiatum L.)

TRICHOLAENA Schrad. 514

monachne (Trin.) Stapf & C.E.Hubb., N, W, C, E, S

(*T. monachne* var. *annna* J.G.Anderson)

monachne var. annna J.G.Anderson = T. monachne

RHYNCHELYTRUM Nees 517

bellespicatum (Rendle) Stapf & C.E.Hubb. = Melinis longiseta subsp. bellespicata

grandiflorum Hochst. = Melinis repens subsp.

grandiflora

eylesii Stapf & C.E.Hubb = Melinis sub-

glabra

kallimorphon Clayton = Melinis kallimorpha minutiflorum (Rendle) Stapf & C.E.Hubb. =

Melinis longiseta subsp. longiseta

myassanum (Mez) Stapf & C.E.Hubb. =

Melinis nerviglumis

repens (Willd.) C.E.Hubb. = Melinis repens subsp. repens

setifolium (Stapf) Chiov. = Melinis nerviglum-

subglabrum (Mez) Stapf & C.E.Hubb. = Melinis subglabra

stolzii (Mez) Stapf & C.E.Hubb. = Melinis repens subsp. repens

villosum (Parl.) Chiov. = Melinis repens subsp. repens

517/1 **MELINIS** P.Beauv.

ambigua Hack. subsp. ambigua, N, W, C, E (M. longicanda (Mez) Stapf)

ambigua Hack. subsp. longicauda (Mez) Zizka, N

effusa (Rendle) Stapf, E

kallimorpha (Clayton) Zizka, N, W, C, E, S

(Rhynchelytrum kallimorphon Clayton)

longiseta (A.Rich.) Zizka subsp. bellespicata (Rendle) Zizka, N, W, C, E, S

(Rhynchelytrum bellespicatum (Rendle) Stapf & C.E.Hubb.)

longiseta (A.Rich.) Zizka subsp. longiseta, N, W, C, E, S

(Rhynchelytrum minntiflorum (Rendle) Stapf & C.E.Hubb.)

macrochaeta Stapf & C.E.Hubb., N, W, C, E,

maitlandii Stapf & C.E.Hubb. = M. minuti-

minutiflora P.Beauv., C, E

(M. maitlandii Stapf & C.E.Hubb.)

nerviglumis (Franch.) Zizka, N, W, C, E, S

(Rhynchelytrum nyassanum (Mez) Stapf & C.E.Hubb.)

(Rhynchelytrum setifolium (Stapf) Chiov.)

repens (Willd.) Zizka subsp. grandiflora (Hochst.) Zizka, N, W, C, E, S

(Rhynchelytrum grandiflorum Hochst.)

repens (Willd.) Zizka subsp. nigricans (Mez) Zizka, N

repens (Willd.) Zizka subsp. repens, N, W, C, E, S

(Rhynchelytrum repens (Willd.) C.E.Hubb.)

(Rhynchelytrum stolzii (Mez) Stapf & C.E.Hubb.)

(Rhynchelytrum villosum (Parl.) Chiov.) subglabra Mez, N, W, C, E, S

(Rhynchelyntrum eylesii Stapf & C.E.Hubb.)

(Rhynchelyntrum subglabrum (Mez) Stapf & C.E.Hubb.)

tenuissima Stapf, N, C, E, S

518 **HYLEBATES** Chippind. cordatus Chippind., N

521 STEREOCHLAENA Hack.

cameronii (Stapf) Pilg., N, W, C, E, S

(Chloridion cameronii (Stapf) Pilg.)

(S. jeffreysii Hack.)

jeffreysii Hack. = **S. cameronii**

521/1 CHLORIDION Stapf

cameronii (Stapf) Pilg. = S. cameronii

523 MEGALOPROTACHNE C.E.Hubb. albescens C.E.Hubb., W (M. glabrescens Roiv.) glabrescens Roiv. = M. albescens

524 **DIGITARIA** Haller

acuminatissima Stapf, N, W, E (D. acuminatissima subsp. inermis P.Goetgh.) acuminatissima subsp. inermis P.Goetgh. = D. acuminatissima

adscendens (Kunth) Henrard = D. ciliaris angolensis Rendle, N, C, E apiculata Stent = D. maitlandii brazzae (Franch.) Stapf, N, W, C, E, S ciliaris (Retz.) Koeler, N, C, E, S (D. adscendens (Kunth) Henrard) comifera Pilg., N, W, C, E (D. lunularis Henrard) compressa Stapf, N debilis (Desf.) Willd., N, W, C, E, S diagonalis (Nees) Stapf, N, C, E, S

eriantha Steud., N, W, C, E, S (D. livida Henrard)

(D. nemoralis Henry) eylesii C.E.Hubb., N, C, S friesii Pilg. = D. longiflora gayana (Kunth) Stapf, N, W, C, S gazensis Rendle, N, W, C, E, S lancifolia Henrard = D. pearsonii livida Henrard = D. eriantha

diversinervis (Nees) Stapf, C

longiflora (Retz.) Pers., E, S (D. friesii Pilg.)

lunularis Henrard = D. comifera maitlandii Stapf & C.E.Hubb., E, S

(D. apiculata Stent) maniculata Stapf, W

milanjiana (Rendle) Stapf, N, W, C, E, S monodactyla (Nees) Stapf, N, W, C, E, S nemoralis Henry = D. eriantha

nitens Rendle, N, C, E, S

nuda Schumach., N, C, E

pearsonii Stapf, E

(D. lancifolia Henrard) perrottetii (Kunth) Stapf, N, W, C, E, S

pseudodiagonalis Chiov., N

remotigluma (De Winter) Clayton, N, C

sanguinalis (L.) Scop., N, W, C, E

scalarum (Schweinf.) Chiov., N, C, E

setifolia Stapf, E

ternata (A.Rich.) Stapf, N, W, C, E, S

thouaresiana (Flüggé) A.Camus, N, C, E, S velutina (Forssk.) P.Beauv., N, W, C, E, S

(D. zeylieri (Nees) Henrard)

zeyheri (Nees) Henrard = D. velutina

533 PENNISETUM Rich.

*clandestinum Chiov., W, C, E, S glaucum (L.) R.Br., N, W, C (P. tupliodes (Burm.) Stapf & C.E.Hubb.) macrourum Trin., N, W, C, E, S (P. glaucocladum Stapf & C.E.Hubb.) (P. niacropogon Stapf & C.E.Hubb.) massaicum Stapf, S polystachion (L.) Schult. subsp. atrichum (Stapf & C.E.Hubb.) Brunken, N polystachion (L.) Schult. subsp. polystachion, N. C. E

(P. subangustum (Schum.) Stapf & C.E.Hubb.) purpureum Schumach., N, W, C, E, S setaceum (Forssk.) Chiov., W, C, E thunbergii Kunth, C, E trisetum Leeke, C, S (P. typhoides (Burm.f.) Stapf & C.E.Hubb.) typlioides (Burm.f.) Stapf & C.E.Hubb. = P. tri-

unisetum (Nees) Benth., N, C, E (Beckeropsis uniseta (Nees) K.Schum.)

533/1 BECKEROPSIS K.Schum. uniseta (Nees) K.Schum. = Pennisetum unisetum

CENCHRUS L. 534 biflorus Roxb., W ciliaris L., N, W, C, E, S

539 ANTHEPHORA Schreb. gracilis Stapf & C.E.Hubb. = A. truncata pubescens Nees, S truncata Robyns, N, S (A. gracilis Stapf & C.E.Hubb.)

ISACHNE R.Br. 546

aetliiopica Stapf & C.E.Hubb. = I. mauritiana mauritiana Kunth, E (I. aethiopica Stapf & C.E.Hubb.) nervata Franch. = Panicum nervatum

COELACHNE R.Br. 549 africana Pilg., E (C. paludosa Peter)

ARUNDINELLA Raddi 557 nepalensis Trin., W, C, E, S (A. rigida Nees) *rigida* Nees = **A.** nepalensis

DANTHONIOPSIS Stapf 559 chimanimaniensis (J.B.Phipps) Clayton, E (Gazachloa chimanimaniensis J.B.Phipps) dinteri (Pilg.) C.E.Hubb., S (Jacquesfelixia dinteri (Pilg.) J.B.Phipps) minor Stapf & C.E.Hubb. = D. viridis petiolata (J.B.Phipps) Clayton, W (Rattraya petiolata J.B.Phipps) pruinosa C.E.Hubb., N, W, C, E, S (D. pruinosa var. gracilis C.E.Hubb.) (Petrina pruinosa (C.E.Hubb.) J.B.Phipps)

pruinosa var. gracilis C.E.Hubb. = D. pruinosa

559 DANTHONIOPSIS Stapf (cont.)
viridis (Rendle) C.E.Hubb., N, W, C
(D. minor Stapf & C.E.Hubb.)
(D. westii J.B.Phipps)
westii J.B.Phipps = D. viridis

559/1 GAZACHLOA J.B.Phipps

cliimanimaniensis J.B.Phipps = Danthoniopsis

chimanimaniensis

559/2 JACQUESFELIXIA J.B.Phipps

dinteri (Pilg.) J.B.Phipps = Danthoniopsis

dinteri

559/3 RATTRAYA J.B.Phipps

petiolata J.B.Phipps = Danthoniopsis petiolata

559/4 PETRINA J.B.Phipps

prninosa (C.E.Hubb.) J.B.Phipps = Danthoniopsis pruinosa

561 TRISTACHYA Nees

liispida (L.f.) K.Schum. = T. leucothrix
liitchcockii (C.E.Hubb.) Conert = T. lualabaensis

leucothrix Nees, N, W, C, E, S (*T. hispida* (L.f.) K.Schum.)

lualabaensis (De Wild.) J.B.Phipps, W (*T. liitchcockii* (C.E.Hubb.) Conert)

lualabaensis Clayton = T. lualabaensis nodiglumis K.Schum., N, W, C, E, S

(Dolichochaete longispiculata (C.E.Hubb.)
J.B.Phipps)

(*Dolichochaete nodiglumis* (K.Schum.) J.B.Phipps) **rehmannii** Hack., N, W, C

(Dolichochaete rehmannii var. pilosa (C.E.Hubb.) J.B.Phipps)

(*T. relımannii* var. *helenae* (Buscal. & Muschl.) C.E.Hubb.)

relimannii var. İnelenae (Buscal. & Muschl.) C.E.Hubb. = T. rehmannii

superba (De Not.) Schweinf. & Asch., N, W,

(*Loudetia superba* De Not.) (*Trichopteryx gigantea* Stapf)

welwitschii var. major C.E.Hubb. = T. nodiglumis

561/1 DOLICHOCHAETE (C.E.Hubb.) J.B.Phipps longispiculata (C.E.Hubb.) J.B.Phipps = Tristachya nodiglumis nodiglumis (K.Schum.) J.B.Phipps = Trista-

Tristachya rehmannii

chya nodiglumis rehunaunii var. mosambicensis J.B.Phipps = Tri-

stachya rehmannii
rehmannii var. pilosa (C.E.Hubb.) J.B.Phipps =

562 **ZONOTRICHA** (C.E.Hubb.) J.B. Phipps inamoena (K.Schum.) Clayton

563 TRICHOPTERYX Nees

dregeana Nees, E, S

elegantula subsp. stolziana J.B.Phipps = T. stolziana

flavida Stapf = Loudetia flavida
gigautea Stapf = Tristachya superba
gracillima C.E.Hubb. = T. marungensis
lauata Stent & J.M.Rattray = Loudetia lanata
marungensis Chiov., E
(T. gracillima C.E.Hubb.)
stolziana Henrard
(T. elegantula subsp. stolziana J.B.Phipps)

565 LOUDETIA Steud.

arundinacea (A.Rich.) Steud., N flavida (Stapf) C.E.Hubb., N, W, C, E, S (*Trichopteryx flavida* Stapf) lanata (Stent & J.M.Rattray) C.E.Hubb., N, W,

C, S (*Trichopteryx lanata* Stent & J.M.Rattray)

simplex (Nees) C.E.Hubb., N, W, C, E, S superba De Not. = Tristachya superba

569 ERIOCHRYSIS P.Beauv. brachypogon (Stapf) Stapf, C, E pallida Munro, E, S purpurata (Rendle) Stapf, E

570 MISCANTHUS Andersson junceus (Stapf) Pilg., N, W, C, E, S (Miscanthidium junceum (Stapf) Stapf) violaceus (K.Schum.) Pilg., C, E, S (Miscanthidium violaceum (K.Schum.) Robyns)

570/1 MISCANTHIDIUM Stapf

junceum (Stapf) Stapf = Miscanthus junceus

violaceum (K.Schum.) Robyns = Miscanthus

violaceus

571 IMPERATA Cirillo

cylindrica (L.) Raeusch. var. africana (Andersson) C.E.Hubb. = I. cylindrica cylindrica (L.) Raeusch. var. major (Nees) C.E.Hubb. = I. cylindrica cylindrica (L.) Raeusch., N, W, C, E, S (I. cylindrica (L.) Raeusch. var. africana (Andersson) C.E.Hubb.) (I. cylindrica (L.) Raeusch. var. major (Nees)

572 EULALIA Kunth

aurea (Bory) Kunth, N, W, C (E. geniculata Stapf) geniculata Stapf = E. aurea villosa (Thunb.) Nees, E

C.E.Hubb.)

582 TRACHYPOGON Nees

capensis (Thunb.) Trin. = T. spicatus
spicatus (L.f.) Kuntze, N, W, C, E, S

(T. capensis (Thunb.) Trin.)

584 SORGHUM Moench

*dochna (Forssk.) Snowden, C

alumm Parodi = S. halepense

bicolor (L.) Moench subsp. arundinaceum

(Desv.) Stapf, N, W, C, E, S

(S. verticilliflorum (Steud.) Stapf)

(S. verticilisforum (Steud.) Stapt)
bicolor (L.) Moench subsp. drummondii
(Steud.) de Wet, N
(S. sudanense (Piper) Stapf)

halepense (L.) Pers., N, W, C, S (*S. almum* Parodi)

sndanense (Piper) Stapf = S. bicolor subsp. drummondii versicolor Andersson, N, W, C, E, S

verticilliflorum (Steud.) Stapf = S. bicolor subsp. arundinaceum

586 **SORGHASTRUM** Nash **bipennatum** (Hack.) Pilg., N, C, E **friesii** (Pilg.) Pilg., N, W, C, S

588 CLEISTACHNE Benth. sorghoides Benth., N, C, E

589 **VETIVERIA** Bory **nigritana** (Benth.) Stapf, N, W, C

590 CHRYSOPOGON Trin.

montanns Trin. var. tremnlns (Hack.) Stapf =
C. serrulatus
serrulatus Trin., N, W, C, S
(C. montanus Trin. var. tremulus (Hack.) Stapf)

591 DICHANTHIUM Willemet
annulatum (Forssk.) Stapf var. papillosum
(A.Rich.) de Wet & Harlan, N, W, C, E, S
(D. nodosum sensu Acocks)
aristatum (Poir.) C.E.Hubb., C
bladlii (Retz.) Clayton = Bothriochloa bladhii
nodosum sensu Acocks = D. annulatum var.
papillosum

594 **CAPILLIPEDIUM** Stapf **parvifolium** (R.Br.) Stapf, N, W, C, E, S

595 BOTHRIOCHLOA Kuntze
bladhii (Retz.) S.T.Blake, N, W, C, E, S
(B. glabra (Roxb.) A.Camus)
(Dichanthium bladhii (Retz.) Clayton)
glabra (Roxb.) A.Camus = B. bladhii
insculpta (A.Rich.) A.Camus, N, W, C, E, S
radicans (Lehm.) A.Camus, N, W, C, E, S

596 **EUCLASTA** Franch. **condylotricha** (Hochst. ex Steud.) Stapf, N, C

597 **ISCHAEMUM** L.

afrum (J.F.Gmel.) Dandy, N, W, C, E, S
(I. brachyatherum (Hochst.) Hack.)
(I. glaucostachyum Stapf)
arcnatum (Nees) Stapf = I. fasciculatum
brachyatherum (Hochst.) Hack. = I. afrum
fasciculatum Brongn., N, W, C, E, S
(I. arcuatum (Nees) Stapf)
franksae J.M.Wood = Phacelurus franksae
glaucostachyum Stapf = I. afrum
roseomentosum J.B.Phipps, W, S

598 **THELEPOGON** Roth **elegans** Roem. & Schult., N

603 **SEHIMA** Forssk. ischaemoides Forssk., N, W, C, E, S

606 ANDROPOGON L.

appendiculatus Nees, E
brazzae Franch.,W
chinensis (Nees) Merr., N, W, C, E, S
(A. schinzii Hack.)
distachyos L., E
eucomus Nees, N, W, C, E, S
fastigiatus Sw., N, W, C, E, S
(Diectomis fastigiata (Sw.) Kunth)
gayanus Kunth var. polycladus (Hack.) Clayton, N, W, C, E, S
(A. gayanus Kunth var. squanulatus (Hochst.)

gayanus Kunth var. squamulatus (Hochst.) Stapf = Adropogon gayanus var. polycladus

huillensis Rendle, C, E, S lacunosus J.G.Anderson, E laxatus Stapf, W, C, E ligulatus (Stapf) Clayton, W, C, E mannii Hook.f., E (A. flabellifer Pilg.) perligulatus Steud., N, C, E, S

perligulatus Steud., N, C, E, S
roseus Napper = A. textilis
schinzii Hack. = A. chinensis
schirensis A.Rich., N, W, C, E, S
(A. schirensis A.Rich. var. angustifolius Stapf)
schirensis A.Rich. var. angustifolius Stapf = A.
schirensis
textilis Rendle, N, C

textilis Rendle, N, C (*A. roseus* Napper)

606/1 DIECTOMIS Kunth

fastigiata (Sw.) Kunth = Andropogon fastigiatus

608 CYMBOPOGON Spreng.

*citratus (DC.) Stapf, C
caesius (Hook. & Arn.) Stapf, N, W, C, E, S
(C. excavatus (Hochst.) Stapf)
excavatus (Hochst.) Stapf = C. caesius
giganteus Chiov., N, C, S

- 608 CYMBOPOGON Spreng. (cont.)
 nardus (L.) Rendle, N, W, C, E, S
 (C. validus Burtt Davy)
 plurinodis (Stapf) Burtt Davy = C. pospischilii
 pospischilii (K.Schum.) C.E.Hubb., N, W, C, S
 (C. plurinodis (Stapf) Burtt Davy)
 validus Burtt Davy = C. nardus
- 609 SCHIZACHYRIUM Nees
 brevifolium (Sw.) Büse, N, W, C, E
 exile (Hochst.) Pilg., N, W, C, E, S
 (S. inclusum Stent)
 inclusum Stent = S. exile
 jeffreysii (Hack.) Stapf, N, W, C, E, S
 (S. ursulus Stapf)
 mukuluense B.K.Simon, N, C, E, S
 sanguineum (Retz.) Alston, N, W, C, E, S
 ursulus Stapf = S. jeffreysii
- 610 ARTHRAXON P.Beauv. lancifolius (Trin.) Hochst., N, W, E
- 611 **DIHETEROPOGON** (Hack.) Stapf **amplectens** (Nees) Clayton, N, W, C, E **grandiflorus** (Hack.) Stapf, C, E
- 612 **HYPARRHENIA** Fourn. anamesa Clayton, N. W. C. E. S. bracteata (Willd.) Stapf, N, C, E, S collina (Pilg.) Stapf, N, W, C, E, S cymbaria (L.) Stapf, N, W, C, E, S dichroa (Steud.) Stapf, N, W, C, E, S diplandra (Hack.) Stapf, E dissoluta (Nees ex Steud.) C.E.Hubb. = Hyperthelia dissoluta dregeana (Nees) Stapf, N, E eylesii C.E.Hubb. = Elymandra grallata familiaris (Steud.) Stapf, N filipendula (Hochst.) Stapf var. filipendula, N, W, C, E, S filipendula (Hochst.) Stapf var. pilosa (Hochst.) Stapf, N, W, C, E, S finitima (Hochst.) Andersson, N, C, E, S gazensis (Rendle) Stapf, N, E, S glauca Stent = H. tamba hirta (L.) Stapf, N, C, E newtonii (Hack.) Stapf var. macra Stapf, N, newtonii (Hack.) Stapf var. newtonii, N, C,
 - E
 nyassae (Rendle) Stapf, N, W, C, E, S
 pilgeriana C.E.Hubb., C, E
 poecilotricha (Hack.) Stapf, N, W, C, E
 quarrei Robyns, C, E
 rudis Stapf, N, W, C
 rufa (Nees) Stapf var. rufa, N, W, C, E, S
 schimperi (A.Rich.) Stapf, N, C, S
 tamba (Steud.) Stapf, N, C

- (*H. glauca* Stent) variabilis Stapf, N, C, E, S welwitschii (Rendle) Rendle, N
- 614 **HYPERTHELIA** Clayton dissoluta (Nees) Clayton, N, W, C, E, S (*Hyparrhenia dissoluta* (Nees ex Steud.) C.E. Hubb.)
- 616 ELYMANDRA Stapf grallata (Stapf) Clayton, N, W, C, E (*Hyparrhenia cylesii* C.E.Hubb.) lithophila Clayton, E
- 618 MONOCYMBIUM Stapf ceresiiforme (Nees) Stapf, N, W, C, E, S
- 621 **HETEROPOGON** Pers. **contortus** (L.) Roem. & Schult., N, W, C, E, S **melanocarpus** (Elliott) Benth., N, W, C, E, S
- 622 **THEMEDA** Forssk. triandra Forssk., N, W, C, E, S
- 624 URELYTRUM Hack.
 agropyroides (Hack.) Hack., C, E, S
 (U. squarrosum Hack.)
 squarrosum Hack. = U. agropyroides
- 625 LOXODERA Launert caespitosa (C.E.Hubb.) Simon, C
- 626 ELIONURUS Kunth

 argenteus Nees = E. muticus

 muticus (Spreng.) Kunth, N, W, C, E, S

 (Elionurus argenteus Nees)

 trapnellii C.E.Hubb. = E. tripsacoides

 tripsacoides Willd., N, C

 (E. trapnellii C.E.Hubb.)
- 627 PHACELURUS Griseb. franksae (J.M.Wood) Clayton, E (Iscluaenium franksae J.M.Wood)
- 628 VOSSIA Wall. & Griff. cuspidata (Roxb.) Griff., N, W, S
- 629 **HEMARTHRIA** R.Br. **altissima** (Poir.) Stapf & C.E.Hubb., N, W, C, E, S
- 631 **RHYTACHNE** Desv. **rottboellioides** Desv., C, E, S
- 632 COELORACHIS Brongn. afruarita (Stapf) Stapf, C, E, S (Rottboellia afruarita Stapf)

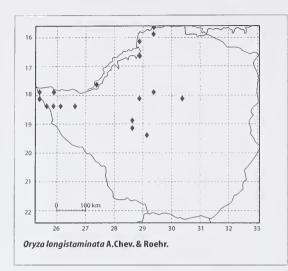
635 **ROTTBOELLIA** L.f.

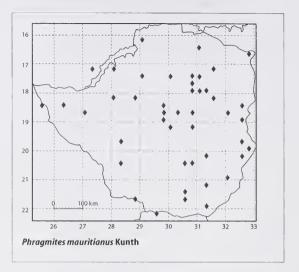
afruarita Stapf = Coelorachis afruarita cochinchinensis (Lour.) Clayton, N, W, C, E, S

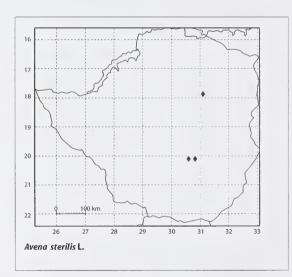
(*Rottboellia exaltata* L.f.) *exaltata* L.f. = **R. cochinchinensis**

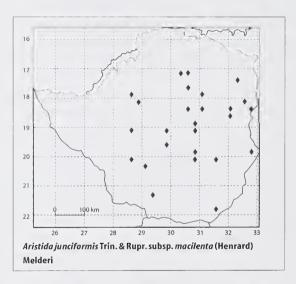
- 637 **HACKELOCHLOA** Kuntze **granularis** (L.) Kuntze, N, W, E, S
- 651 COIX L. lacryma-jobi L., C

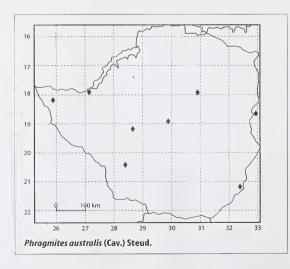
Distribution maps of useful grasses

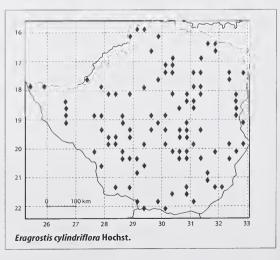


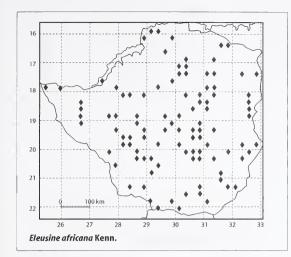


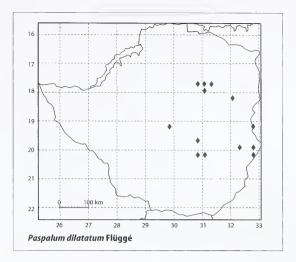


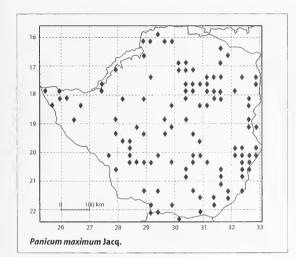


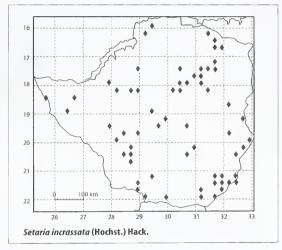


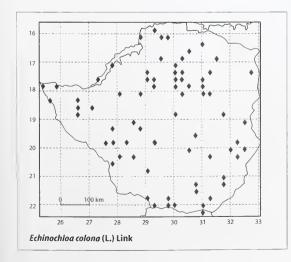


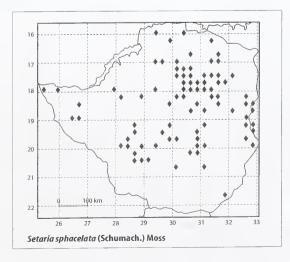


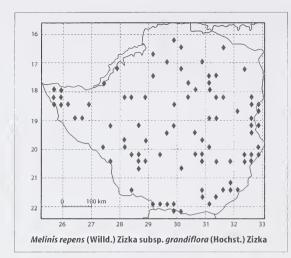


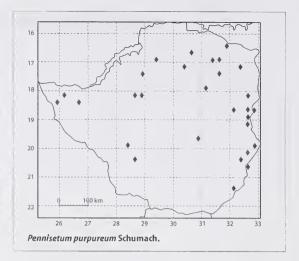


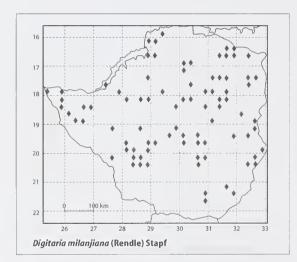


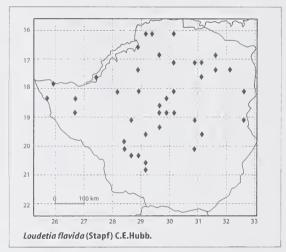


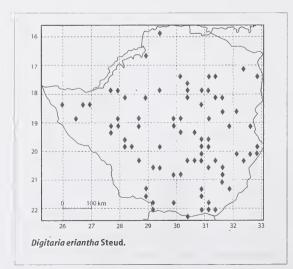


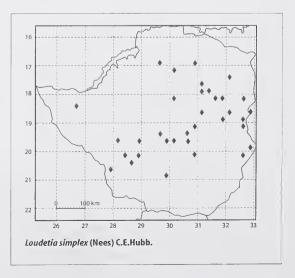


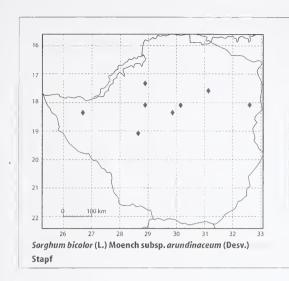


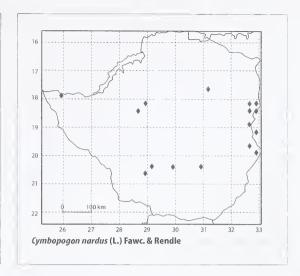


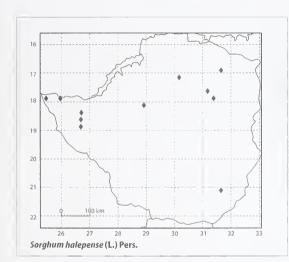


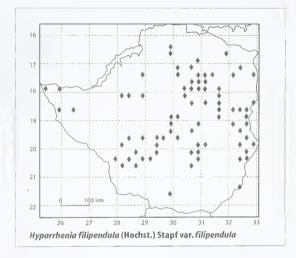


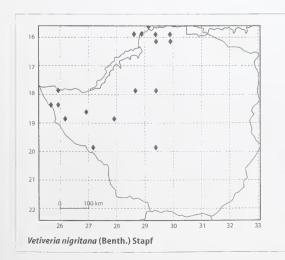


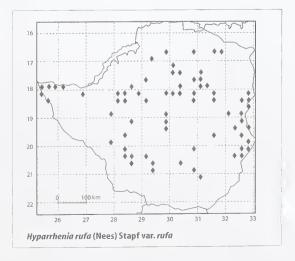


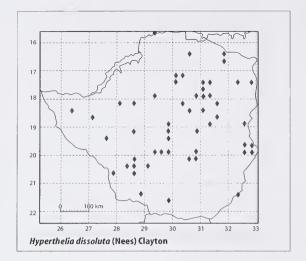


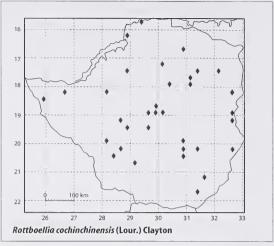












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About SABONET

This publication is a product of the Southern African Botanical Diversity Network (SABONET), a programme aimed at strengthening the level of botanical expertise, expanding and improving herbarium and botanic garden collections, and fostering closer collaborative links among botanists in the southern African subcontinent.

The main objective of SABONET is to develop a strong core of professional botanists, taxonomists, horticulturists, and plant diversity specialists within the ten countries of southern Africa (Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe). This core group will be competent to inventory, monitor, evaluate, and conserve the botanical diversity of the region in the face of specific development challenges, and to respond to the technical and scientific needs of the Convention on Biological Diversity.

To enhance the human resource capacity and infrastructure available in the region, SABONET offers training courses, workshops, and collaborative expeditions in under-collected areas. The programme produces a newsletter, SABONET News, and a series of occasional publications, the Southern African Botanical Diversity Network Report Series, of which this publication is part.

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- The Global Environment Facility (GEF)/United Nations Development Programme (UNDP)

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LOCATION

Physical address: the National Herbarium and Botanic Garden is situated about 4 km North of the Harare city centre within the suburb of Alexandra Park, on the corner of Fifth Street extension and Downie Avenue. It is easily accessed from either Fifth Street or Sam Nujoma Street.

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MANDATE

The National Herbarium and Botanic Garden is a centre for research and information on the indigenous plants of Zimbabwe. It is responsible for the study of Zimbabwe flora in order to promote its conservation, development and sustainable use. Its mission is: To increase knowledge and appreciation of Zimbabwean plants. It fulfills this mission by looking after the plant specimens that are the essential resource material required in studying plant characters in order to arrive at their identity and names. The National Herbarium stores preserved plant specimens while the living specimens are grown in the National Botanic Garden.

The institute has three interlinked sections: the herbarium, the botanic garden and the education centre.

The Herbarium has about 500 000 plant specimens. It is the main reference centre for research on identifying and naming plants of the Flora Zambesiaca Region. This region comprises Zimbabwe, Zambia, Malawi, Mozambique, Botswana and the Caprivi.

The Botanic Garden grows over 900 trees and shrubs of Zimbabwe in groups to show the associations that are found in various parts of the country. It has sections with trees of the Highveld, Lowveld and Eastern Highlands. Also growing are a number of trees from other countries that have climatic conditions similar to Zimbabwe e.g. Asia and Australia.

The Education Centre disseminates information on the plants of Zimbabwe and the plant kingdom in general to educational institutions especially schools.

The aims and objectives of the National Herbarium and Botanic Garden can be summarized as follows:

- i) to conserve, enhance and curate Zimbabwe's principal collection of botanical specimens for national and international reference and study;
- ii) to do scientific research and documentation on Zimbabwean plants and plant communities based on the herbarium collection and field surveys;
- iii) to provide botanical services to Government Departments, NGOs, students, researchers and the public;
- iv) to provide a focal point for the international network of herbaria, in order to facilitate research on the flora of Zimbabwe and the region by national and international researchers;
- v) to provide a pleasant and peaceful environment in which the Harare community can enjoy activities that are compatible with Botanic Garden management;
- vi) to raise revenue that will help in the development and maintenance of the National Herbarium and Botanic Garden.

ADMINISTRATION

The National Herbarium and Botanic Garden is administered by the Division of Agricultural Research and Extension (AREX), in the Ministry of Lands, Agriculture and Rural Resettlement, in conjunction with the Botanic Garden Fund Committee. The latter is a Board of Trustees who are appointed by the Minister of Agriculture. Their main role is to compliment government efforts in the running of the institute by raising funds. Some of the notable achievements of this committee in recent years include the fencing and upgrading of the public car park, the construction of the Restaurant, Desert House, Education Centre, Office Block of the nursery and the refurbishment of the National Herbarium. In short, the Botanic Garden Fund Committee spearheads almost all development projects at the National Herbarium and Botanic Garden.



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